



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
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IN REPLY REFER TO

4855
Ser 04XQ/01-032
3 April 2001

From: Commander, Naval Sea Systems Command

Subj: NAVSEA/NAVSHIPYD/SUPSHIP/CONTRACTOR QUALITY ASSURANCE
WORKSHOP

Encl: (1) 13-15 February 2001 Quality Workshop Report

1. The NAVSEA/NAVSHIPYD/SUPSHIP/CONTRACTOR Quality Assurance (QA) Workshop was hosted by NAVSEA SUPSHIP New Orleans at the John Alario Event Center in Westwego, Louisiana, 13-15 February. The objectives of the workshop were to provide attendees with the latest information on ship construction/repair subjects; to enhance communication and team building between Government agencies and private contractors; and to improve all aspects of the ship repair and shipbuilding process. The integration and participation of NAVSEA, SUPSHIPS, Naval Shipyards, TYCOM representatives, and private industry representatives helped make this a successful workshop.

2. The workshop report is forwarded for your information as enclosure (1) and can be viewed at the following internet address: <http://po7.repair.navy.mil/04XQ/>. Additionally, all presentation material referenced in this report can be accessed through this same web address. Workshop participants' addresses and telephone numbers are also included in this report.

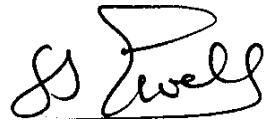
3. The workshop report is being sent to all attendees. The SUPSHIP QA Officers/Directors are requested to distribute additional copies of the report to cognizant contractor QA Managers who were not in attendance.

4. The next QA workshop has been tentatively scheduled for August 2001 and will be hosted by Norfolk Naval Shipyard, in Norfolk, Virginia. Specific details will be promulgated when available.

5. The workshop and workshop report address the shipbuilding and ship repair industry as a whole. Factors, and other matters not addressed, may affect the legal and contractual rights and responsibilities related to specific matters. Information, positions, and policies gleaned from the workshop and the workshop report, therefore, should not be considered determinate of individual questions, issues, and cases; and, shall not be considered as authorizing any change in Government contracts.

Subj: NAVSEA/NAVSHIPYD/SUPSHIP/CONTRACTOR QUALITY ASSURANCE
WORKSHOP

6. The points of contact for this workshop are Mr. Dan Leffingwell, Mr. Mike Poole, Navsea New Orleans at (504) 678-2301/2303, and Mr. Paul Colahan, NAVSEA 04XQ at (703) 602-4222 ext. 210 or DSN 332-4222 ext. 210.

A handwritten signature in black ink, appearing to read "G. S. Ewell". The signature is stylized with a large, looped "G" and a cursive "Ewell".

G. S. Ewell
By direction

Distribution:

Workshop Attendees
FKP7 (Codes 100, 130)
FKP8 (Codes 100, 300)
CINCLANTFLT
CINCPACFLT
DCMCA
SPAWAR



QUALITY WORKSHOP **REPORT**

13-15 FEBRUARY 2001

New Orleans, LA

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I. QUALITY ASSURANCE WORKING GROUP CHARTER

1. VISION – Our vision is to become the catalyst for Quality Assurance process improvements affecting the ship repair/new construction industry nationwide.

2. PURPOSE – The purpose of the QA Working Group is to implement Quality Process Improvement determined by the customers, suppliers, and stakeholders associated with the ship repair/new construction industry. We will work as a team, including our customers and suppliers, to share ideas, information, successes, and failures. We will strive to make improvements through effective integration of all stakeholders. We will receive guidance, approval, support, and/or limitations from the Steering Group (list names, organization). We will determine applicable action items from inputs received from customers, suppliers, and stakeholders. Our focus for implementing and improving QA related processes would include a system's perspective thereby solicited participation by all stakeholders throughout the Fleet Community. This group has the authority to charter subcommittees and/or lower level teams.

3. MEMBERSHIP:

Steering Group
Representative
Downward Linking Pin From
the BOD:

CAPT. Phil Johnson
SUPSHIP Pascagoula

QA Working Group Leader and
Upward Linking Pin to the BOD:

Mr. Greg Ewell,
NAVSEA 04XQ

Members:

SUPSHIP QA Officers/Directors
MSR/ABR QA Managers
Type Commanders/Representatives
NAVSEA/PEO
SPAWAR
Naval Shipyard QA Directors

4. COORDINATION:

- ◆ Workshop Hosts are responsible for maintaining the QA Working Group continuity. This includes the identification, execution, and status of action items to ensure their timely completion through communications with Action Item Coordinators.
- ◆ The QA Working Group will strive to arrive at decisions by consensus of its members.
- ◆ The charter may be modified by consensus of its members.

5. OBJECTIVES:

- ◆ Reduction of non-value added steps in QA processes
- ◆ Develop/increase use of QA data
- ◆ Reduce/eliminate non-value added steps in QA processes
- ◆ Improve quality and reduce costs
- ◆ Remove institutional barriers that obstruct the sharing of information and knowledge
- ◆ Promote QA education and training
- ◆ Improve communication
- ◆ Provide customer satisfaction
- ◆ Increase standardization for the benefit of all stakeholders

6. FOCUS:

- ◆ Acquisition reform
- ◆ ISO 9000 Implementation and Training
- ◆ Propose changes to NAVSEA Standard Items directly related to quality
- ◆ Anticipate and manage the implementation of changes to specifications
- ◆ Encourage Specification Reform (i.e., commercial specs/performance specs, past performance)
- ◆ Standardization of processes, systems, and metrics
- ◆ Specific action items as assigned by NAVSEA or the BOD

7. TIMETABLE

- ◆ The focus of the charter will be updated as necessary during each QA Working Group session.
- ◆ The Workshop Host will update action items during the QA Working Group session.
- ◆ Membership will determine agenda items for the next QA Working Group session during the last day of each QA Working Group session.
- ◆ All action items will be subject to milestones/completion as designated by the QA Working Group.

II.

EXECUTIVE SUMMARY

NAVSEA SUPSHIP New Orleans hosted the NAVSEA/NAVSHIPYD/SUPSHIP/CONTRACTOR Quality Assurance Workshop from 13-15 February 2001 at the John Alario Event Center, Westwego, Louisiana. Mr. Dan Leffingwell QA Director, NAVSEA SUPSHIP New Orleans, and Mr. Greg Ewell, NAVSEA 04XQ, were the host and workshop chairmen respectively. Captain David J. Vogel, Commanding Officer, NAVSEA SUPSHIP New Orleans, Mr. Greg Ewell, Director, Quality Program and Certification Office, Mr. Bernie Clark NAVSEA 04X and Mr. Ron Davis, Deputy Supervisor, NAVSEA SUPSHIP Pascagoula made opening remarks.

Captain Vogel welcomed the group to New Orleans, and emphasized the importance of the Workshop in fostering the teamwork needed to support the current shipbuilding environment. Mr. Ewell stated that the group must share in the benefits of standardization, and work together to improve quality performance. Mr. Ewell expressed thanks to the workshop host and introduced Mr. Bernie Clark. Mr. Clark stated that we need to take on the challenge of how we currently do business. He also relayed information from the recent CDR's Forum concerning the "rule of three" which depicts the current actual ship deployment status as only one third of the fleet. Mr. Clark also touched on several topics including: budget shortfalls, number of deficiencies written in both new construction and overhauls, the CNO's concerns with alignment and leadership time, time spent on ship modernization, how the submarine overhauls would push surface ship work to the private yards, the importance of engaging the private sector, elimination of infrastructure and inefficiencies, the need for standardization and incorporation of best practices, Headquarter's interest in the "six sigma" program, the lack of meaningful metrics at Headquarters, and the move from Crystal City to the Washington Navy Yard. Mr. Clark also described Headquarters' plan to restaff the Quality office. Mr. Ron Davis, speaking on behalf of Captain Phil Johnson, Commanding Officer NAVSEA Pascagoula (BOD linkpin), briefly described the relationship of the linkpin to the BOD and the linkpin's effectiveness in routing the working group's message up the chain of command. Mr. Davis recanted the recent bombing of the USS Cole, and how the incident served to emphasize the importance of the well being of our fleet and sailors and in turn how important the NAVSEA Working Group is to the Navy.

Overall, more than 100 attendees took part in the workshop. Included in this number were representatives from NAVSEA Codes 04M5, 04X1, 04XQ, 05BX, 92Q, NAVSEALOGCENDET Portsmouth, Defense Contract Management Agency, COMNAVSURFLANT, COMNAVSURFPAC, COMNAVAIRLANT, various SIMAs, PMS 317, all SUPSHIPs, DET SUPSHIPs, American Bureau of Shipbuilding, NSWC-Carderock, SPAWAR, Naval Shipyards, vendors and over thirty private shipbuilding/repair contractors.

Twenty-five out of thirty-six action items from the August 2000 QA workshop were completed prior to the workshop or through workshop presentations. The other eleven were revised and rolled into the February 2001 action items. In addition, eleven new actions were added to this year's list for a total of twenty-two.

On 15 February, the Naval Shipyard QA Directors and NAVSEA 04XQ decided to continue the workshop jointly. The shipyard gave presentations on shipyard quality issues including Critiques, UIPIs, ERP, PQEs and Weld wire issue and control.

The remainder of the afternoon entailed reviewing and closing action items from the August 2000 workshop, and developing new action items from this workshop.

Section III provides a brief synopsis of all agenda topics, the presenter's name, and a listing of the associated files that can be viewed or downloaded from the following web address: <http://po7.repair.navy.mil/04XQ/>. A history of the workshop is also available on this webpage.

The workshop was enhanced by the active participation of the attendees, particularly during open discussions between the Private Contractors, Fleet representatives, SUPSHIPs, Naval Shipyards, and NAVSEA Headquarters personnel.

The next QA workshop has been tentatively scheduled for August 2001 and will be hosted by Norfolk Naval Shipyard.

III.

PRESENTATIONS

The following presentations are available on the QA Workshop homepage located at: <http://po7.repair.navy.mil/04XQ/>.

1. **DISCUSSION ON CRANE REQUIREMENTS:** Mr. Mike Monju, NAVSEA SUPSHIP New Orleans Navosh Representative, discussed recent crane concerns which included safety and administrative issues such as overloading, dropped booms/loads, certification paperwork, closeout of inspection deficiencies, load test practice/periodicity and mishap reporting and investigations. Mr. Monju also cited the applicable OSHA requirements. **QACRANE.PPT.**
2. **SEA 05BX TECHNICAL AUTHORITY OFFICE BUSINESS PLAN:** Mr. Chris Paquette, NAVSEA 05BX (Acting), gave a presentation on the structure, personnel, mission, corporate engineering behaviors, FY01 initiatives and plans for in-service engineering and fleet support by the SEA 05BX Technical Authority Office. **05BXTECH.PPT**
3. **STATUS ON COATING ISSUES AND PPIs:** Mr. Fred Berry, SEA 05M1 gave an update on the latest developments in the coatings arena, and addressed questions from the August 2000 workshop. One of the issues continues to be the NDT requirements imposed by NSTM 631 which requires a surface ground for the purposes of surface prep to have the required NDT performed subsequent to the grinding. Mr. Berry also addressed the problems with the implementation of PPIs in new construction (see hot link "Field Paint"). **FIELD PAINT.**
4. **DISCUSSION ON CURRENT SP- 3 PANEL INITIATIVES:** Mr. Mark Panoski, Electric Boat, gave a presentation describing the major goals and current initiatives being undertaken by the National Shipbuilding Research Program (NSRP). In addition, he discussed the potential quality issues surrounding the application of high solids coatings and the use of water jets for surface cleaning. Mr. Panoski stated that a guidance manual for high solids application would soon be available on the SRP website. Mr. Panoski will suggest to the panel that the next SP-3 meeting will emphasize Quality Assurance. The NSRP website is <http://www.nsrp.org> Refer to file: **SRP. PPT.**
5. **NONDESTRUCTIVE TEST (NDT) PROGRAM STATUS / CURRENT ISSUES:** Mr. Jack White, NAVSEA 04XQ1J, discussed the current status of the NDT program and other topics and issues, such as, the NDT Working group and the group's proposed charter, proposed consolidation of NAVSEA weld audits and reviews, and the importance of in-process checks vice final product NDT. Mr.

White also addressed the issues of NDT for surface preparation and standardization of NDT processes and equipment. Refer to file: **NDTSTAT.PPT**.

6. **AIT PROGRAM UPDATE / NSA RESPONSIBILITIES / QUALITY ISSUES:** Mr. Ed Moe, NAVSEA 04M5, provided an update on AIT Quality issues. Mr. Moe's presentation included the delegation of AIT ACO to the NSA, number of AITs performed, waterfront feedback and the status of implementation of the AIT Universal Planning Document. See file: **AIT PROG UPDATE. PPT**.
7. **PQDR PROGRAM UPDATE:** Mr. Duncan MacDonald, NSLC DET PTSMH, presented an overview of the Centralized Navy System collection database and associated software programs which collect input on Quality Delivery Data and Contract Performance Data. Data is received from the Navy, DLA, Marine Corps, Prime Navy Contractor sources, and DCMA. The PDREP system will soon be available on the WEB. See file: **PEDREP.PPT**.
8. **QA / ENGINEERING PAPERLESS INITIATIVES:** Mr. Wayne Dorsey, NAVSEA SUPSHIP Groton, presented the current status of the Engineering and QA Paperless Initiative for the major business processes. These are Contract Quality Assurance Program (CQAP), Engineering Baseline, Change and Variance, Design Services, Project Management, and Correspondence Workflow - Elex Mailroom. See file: **QAPAPERLESS.PPT**.
9. **SUPSHIP QA PERFORMANCE METRICS (ACTION ITEM AUG 99-7):** Mr. Dan Leffingwell, NAVSEA SUPSHIP New Orleans; was scheduled to present an overview of the initiative to develop metrics for SUPSHIP QA performance for the SUPSHIPs community wide use and specific applications for the SUPSHIP scorecard, Baldrige/CPI continuous improvement, community benchmarking, and measures of internal QA performance. Due to time constraints the presentation was cancelled, however the file is attached for information. See file: **SUPPERFMETRICS.PPT**.
10. **SUPSHIP NEW CONSTRUCTION METRICS:** Ron Besselevre, QA Manager Ingalls Shipbuilding presented an overview of the implementation of quality metrics at Litton/Ingalls shipyard, that were adopted at the August 2000 workshop (Action Item 99-8) to support the community scorecard and CPARS ratings. See file: **NEWCONSTRMETRICS.PPT**.
11. **PROGRAM MANAGER'S PERSPECTIVE ON QUALITY:** Scott Monroe, PMS 400D31 presented the Program Manager's concerns for priorities, cost of quality, the importance of quantifying true rework costs, analyzing root cause and implementing change. Mr. Monroe also emphasized that both the Shipbuilder and the Navy benefit from cost reduction. See file: **CUSTPERSPECTIVE.PPT**
12. **GOVERNMENT SOURCE INSPECTION/VENDOR CONTROL:** Mr. Carmen Farro, DCMA/NAVSEA Liaison provided a brief history of Dcma and their role in Government Source Inspection (GSI), and sub contract administration. Mr. Farro described the DCMA directive to develop the "One Book" which defines the

requirements and processes used in contract administration. Mr. Farro also stressed the importance of DCMA's risk management approach. See file: **GS1.PPT**

13. **DCMA CRITICAL SUPPLIER PROGRAM:** John Puleo, DCMA NSEP coordinator presented an update on the DCMA critical supplier program. Mr. Puleo stated that the DCMA support team was available to support all requests for joint or independent audits/surveillance. Mr. Puleo also shared recommendations for improved DCMA support, and detailed DCMA's supplier risk management program. See file: **DCMACRITSUP.PPT**
14. **GOVERNMENT SIGNATURE ON INTERIM CHECKPOINTS:** Captain Phil Johnson, Commanding Officer, NAVSEA SUPSHIP Pascagoula was scheduled to give this presentation, however he was unable to attend. The presentation is attached for information. See file: **CHKPTSIGN.PPT**
15. **SIX SIGMA OVERVIEW & INTRODUCTION TO LEAN MANUFACTURING TECHNIQUES:** Captain Mark Nestle provided an overview of the Six Sigma Program detailing the definition, philosophy, objectives, benefits and the tools necessary for implementation. Captain Nestle also discussed the current pilot projects at Norfolk Naval Shipyard. Captain Nestle gave a follow-on presentation on Lean Manufacturing Techniques, a concept conceived by Toyota in the Early 1980s. This concept focuses on a systematic approach to cost improvement through waste reduction and elimination of non-value added activities. See files respectively: **SIXSIGMA.PPT; LEAN MFG.PPT**
16. **CRITIQUES AND TROUBLE REPORTS:** Mr. Paul Colahan, Sea 04XQ presented a brief history of the trouble report (TR) program and revealed Headquarters' plans to use TRs to improve Headquarters' involvement in solving significant problems. Mr. Colahan stated that these plans include defining "significant" and standardization of nuc and non-nuc problems where feasible and ensuring quality and timeliness in both response and resolution. See file: **TRBLREPORT.PPT**
17. **UNIVERSAL PLANNING DOCUMENT:** Mr. Jerry Newton, NAVSEA SUPSHIP San Diego described the architecture and relationship of the Business Process Team (BPT) and the Standard Management Working Group (SMWG) and their role in facilitating Enterprise Maintenance Planning Standardization which will drive the development and implementation of the Universal Planning Document (UPD). The Enterprise Teams will be defined by ESWBS boundaries and will be tasked with the development of standard UPIs, references, business rules, training plans and metrics. Mr. Newton also provided a draft of the UPD. See files: **SMWGINITIATIVES.PPT; NEWUPD.PPT**
18. **ENTERPRISE RESOURCE PLANNING (ERP):** Mr. Cameron Harper, Norfolk Naval Shipyard presented an overview of the ERP program. ERP is a commercially available business software solution that provides timely

information for decision making, provides near real-time data access, automates and integrates business practices, shares common data and Processes across the enterprise. Mr. Harper also presented the ERP approach and deployment schedule. See file: **ERP.PPT**

19. **UIPI FOR CRITIQUES, TROUBLE AND INCIDENT REPORTS:** Mr. Cameron Harper, Norfolk Naval Shipyard provided the status of the development of a UIPI for Critiques, Trouble and Incident Reports. The UIPI includes the applicability, investigation, critique conduct, timeliness, training, report preparation and follow-up action. See file: **UIPITRBLEREP.PPT**
20. **WELD ELECTRODE CONTROL ISSUES:** Mr. John Murtaugh, Portsmouth Naval Shipyard cited recent incident at various activities involving loss of control of welding electrodes used in Level I and subsafe weld joints. Mr. Murtaugh emphasized the importance of strict adherence to key process steps and key overview control actions involving selection, issue, and worksite verification of electrodes. See file: **WELDWIRE.PPT**
21. There was insufficient time to allow the Naval Shipyard to give all of their presentations. Please see file: **PMC.PPT**

IV.

13-15 FEBRUARY NAVSEA/NAVSHIPYD QA DIRECTORS QA MEETING

1. **STATUS OF ACTIONS FROM LAST CONFERENCE:** Mr. Greg Ewell, NAVSEA 04XQ, and Mr. Rick David led a review of the status of actions from the August 2000 Quality Workshop. All actions were determined to either be complete or still in-progress, and new actions were developed from this conference. Mr. Ewell suggested for future workshops action items should be reviewed each day and addressed by the cognizant person/s during the workshop presentation.
2. **UIPI STANDARDIZATION ISSUES:** Mr. Cameron Harper, QA Director, NNSY, discussed the UIPI's currently being reviewed by the Naval Shipyard QAO's. He also discussed actions he is taking to develop best practice QA processes using products from the other shipyards.
3. **STATUS OF AIT PROGRAM:** Mr. Ed Moe, NAVSEA 04M5, provided an update of the AIT quality issues. Mr. Moe discussed the delegation of AIT ACO to the NSA and the AIT Universal Planning Document implementation.
4. **ENTERPRISE RESOURCE PLANNING (ERP):** Mr. Cameron Harper, QA Director, NNSY discussed the ERP Program, a commercially available business software solution for timely information for decision making. Mr. Harper also provided the ERP approach and deployment schedule.
5. **AUDIT PROGRAM SCHEDULING:** Jack White, NAVSEA 04XQ1J discussed a proposal to further coordinate and/or consolidate NAVSEA Audits and reviews of Naval Shipyards. He stated that additional consolidation would allow NSY managers to maintain their focus on completing repair work and delivering ships back to the fleet.
6. **SIX SIGMA OVERVIEW & INTRODUCTION TO LEAN MANUFACTURING:**
Captain Mark Nestle provide an overview on both topics and stimulated a discussion on the philosophy, training required, and the benefits of both programs. Captain Nestle also described the current pilot projects at Norfolk Naval Shipyard. Mr. Ewell stated Headquarters is looking into the feasibility of applying the program to field activities.
7. **CRITIQUES AND TROUBLE REPORTS:** Mr. Colahan discussed Headquarters' plans to utilize Trouble Reports to improve their involvement in solving significant problems. Mr. Colahan stated that it would be necessary to define "significant and place emphasis on quality and timeliness in both response and problem resolution.

V. FEBRUARY 2001 ACTION ITEMS

ITEM#	ACTIVITY	ACTION ITEM	DUE DATE
Feb 01- 01	SEA 05M1 Fred Berry	Evaluate NSTM 631 standards for runs, sags, curtains in high solids paint applications. Need to review the currently defined criteria for this new application. Do the new rules reflect the inspection criterion? (i.e., DFT, near white metal surface requirement, humidity requirements for primer vs. final coat).	
Feb 01- 02	Mark Hopkins SS Groton, SSDG	Evaluate long range plan to shift from QC to QA for high solids paint application.	
Feb 01- 03	Jack White 04XQ	Review/update NAVSEA 05M welding issues at NDT Conference- a. Surface criteria (NSTM 631, MILSTD 1688, 1689, etc.).	
Feb 01- 04	Steve Belangia Coordinate with SMWG 05M1	Review need for standard item for surface vessel surface finish requirements. Does it make sense to have one contract specification that meets the most stringent welding and paint surface requirements? Possibly revise SI 009-32.	
Feb 01- 05	Carlton Kiyabu 05M1	Define technical requirements for partial refurbishments of existing paint systems for areas being repaired vice wholesale refinishing.	
Feb 01- 06	Greg Ewell	QPM revision to ISO 9000 - 2000	
Feb 01- 07	Wayne Dorsey	Provide status of SUPSHIPs QA/Engineering software programs and ERP	
Feb 01- 08	Mary Logsdon	Form SUPSHIP/KTR team to update New Construction Metrics SSPASC (Team Leader), SSGROT, SSBATH, SSNN, SSNO, INGALLS, BIW, QSA (PMS 400), AVONDALE).	
Feb 01- 09	Steve Belangia	Fwd SUPSHIP repair metric data. Provide an update at next meeting, for recommendations to the BOD.	
Feb 01- 10	04X1	Stan Sacha to give overview on intern program.	
Feb 01- 11	PSNS	Post the surveillance attribute sheets on the common QA directory.	
Feb 01- 12	Mike Monju	Gather data on crane mishap trends. Develop standard attributes for crane inspection standards.	

Feb 01- 13	S O Macmillan BAV	Provide details of pipe wall thickness tolerances.	
Feb 01- 14	Chris Paquette	Report on 05BX business plan.	
Feb 01- 15	04XQ	Propose change to weld fab and/or paint documents for consistent surface finish criteria.	
Feb 01- 16	04X	Send out proposed SOM change for trouble reporting to all SUPSHIPS.	
Feb 01- 17	04M Ed Moe 092Q, 04XQ	Keep Naval shipyards and SUPSHIPS apprised of progress in developing rules for authority of NSA/LMA over AITs. Identify and define the deck plate oversight requirements for AIT contractors doing installs IAW 9090-310C and their NAVSEA approved quality systems. Provide a vehicle for tasking and funding the SUPSHIPS and public shipyards with ACO responsibility for all AIT installs, to include oversight and compliance audits. (Who is looking at ILS, safety, environmental, approving weld procedures, etc.?)	
Feb 01- 18	Ed Bluestone	Airlant coordinate TYCOM issues to be discussed at next workshop, i.e. welding, coating etc.	
Feb 01- 19	04XQ	Post QA workshop history on web.	
Feb 01- 20	04XQ	Send critique UIPI to all.	
Feb 01- 21	Woody Vaughn Glenn Ashe	Provide status of SUPSHIP business case analysis of ABS involvement.	
Feb 01- 22	Mary Jane Costa	DCMA update on special emphasis one book.	